

ABSTRACT**Molecular Electronic Device Fabrication Methods and Structures**

This invention generally relates to improved methods of fabricating molecular electronic devices, in particular organic electronic devices such as organic light emitting diodes (OLEDs) by droplet deposition techniques such as ink jet printing. The invention also relates to molecular device substrates fabricated by and/or use in such methods.

A method of fabricating a molecular electronic device, the method comprising: fabricating a substrate having a plurality of banks defining wells for the deposition of molecular material; and depositing molecular electronic material into said wells, dissolved in a solvent, using a droplet deposition technique, to fabricate said device; wherein a said bank has a face, defining an edge of said well, at an angle to a base of the well of greater than a contact angle of said solvent with said bank face; and wherein a height of a said bank above a said base of a said well is less than $2\mu\text{m}$, and more preferably less than $1.5\mu\text{m}$.

Figure 6a-d